

Westchester Education Coalition, NY: NYNEX has funded the Westchester Education Coalition since its beginning in 1988. The coalition acts as conduit and program manager for corporate grant dollars that are ultimately awarded to schools in Westchester and Putnam counties. The coalition is currently doing research on district wide technology plans so that they may share "best practice" models with other districts. In January, 1996, the Coalition announced that it developed a program funded by a grant from the NYNEX Foundation to enable 16 librarians and teachers from public secondary schools in the two counties to improve their computer skills and learn to use the Internet.

Westchester/Putnam BOCES, NY: Westchester/Putnam BOCES has signed a contract for a virtual private network, which will enable intra-district communications at great savings as well as improved communications between districts. Westchester/Putnam BOCES is also served by a Frame Relay network stretching to Rockland County, which provides data communications between the districts and the BOCES Regional Information Center in southern Westchester.

NORTH CAROLINA

North Carolina Information Highway, NC: BellSouth in partnership with CT&T (a subsidiary of Sprint) and GTE announced support for the North Carolina Information Highway (NCIH) in July of 1993. BellSouth estimated it will be spending about \$70 million over the next 10 years for its share of the NCIH.

NORTH DAKOTA

Greater Richland Education and Technology (GREAT), ND: The Greater Richland Education and Technology (GREAT) consortium is made up of six K-12 school districts in rural, southeastern North Dakota. It includes interactive distance learning classrooms at five high schools and one vocational school. Using US West services, distance learning has increased the electives available for students from 25-50% and has allowed these schools to offer an expanded curriculum.

Polar Communications Mutual Aid Corporation; Park River, ND: The company provides interactive television to five schools in their service area. Three other schools in the service area of another independent LEC and US West also receive interactive TV service from Polar Communications. Internet access is available to all schools in Polar's service area, as is centralized voice mail. Fiber optic connection between the central office and all schools was provided at no charge.

OHIO

Chillicothe Telephone; Chillicothe, OH: The company has invested \$1.2 million over the past five years in various efforts to help schools. All service area high schools are now connected to a “switched digital” video system permitting broadcast quality video. All schools have T1 bandwidth to facilitate software sharing and a WAN environment. Internet access is provided to all schools via T1. Chillicothe has also entered into a business partnership with an elementary school for the provision of parental voice mail.

Dawson Bryant Local School & Ironton City Schools, OH: This Ameritech project involves students attending two districts using telecommunications to learn computer skills. Students will range from developmentally disabled to talented and gifted. Technology will be integrated into the curriculum and will be used for homework, extra credit projects, and cooperative learning projects. Use will include electronic mail, bulletin board and Internet resources, full interactive communication, and teacher planning and evaluation.

Distance Learning, OH: In Appalachia, GTE has linked three primary schools with the College of Education at Ohio University, 120 miles away. Third grade students use the network to participate in distance learning via two-way broadcast quality video. The system cost \$200,000 to install.

East Cleveland City Schools, OH: This planned Ameritech project will inject interactive learning environments into the daily curriculum. The project will include community outreach elements involving the public library, the business community and parents. Specifically, the project will focus on the science curriculum at all grade levels and will connect the Caledonia Elementary School with the Math/Science Enrichment Center. The school will also be connected to Cleveland FreeNET/Internet and will establish a homework hotline.

Gahanna-Jefferson City Schools, OH: This Ameritech project calls for providing a communications infrastructure in Gahanna Lincoln High School that will include video, voice, and data distribution to and from every classroom. Through this infrastructure, students and teachers will be able to establish links with the world outside the classroom, including use of the Internet through their computer A-site. Additionally, the project will establish linkages with a number of private businesses.

Learning Community Link, OH: Merging two established fiber optic distance learning networks, this Ameritech project will join sites in the Columbus Public, Dawson-Bryant Local, and Ironton School districts by linking the Columbus Educational Satellite Network and the Appalachian Distance Learning Project. In addition to the schools and classrooms being linked, a metropolitan library system, a community college, Ohio University, and Ohio State University will be included.

Ripley Union Lewis Huntington Local Schools, OH: the primary focus of this Ameritech

project is to provide students with the opportunity and tools to acquire the skills necessary to function in the 21st Century. A broad-based technology planning committee that includes students, teachers, administrators, parents, and community leaders has been established to oversee the long range implementation of technology, of which SchoolNet is a part. Goals for the project include: improving student communication skills through improving research skills and access to the Internet and other on-line resources; expanding mathematical and scientific skills and applications; and developing thinking skills and problem solving techniques through technology.

Rural Programs, OH: Ameritech's distance learning programs in Ohio's Appalachian region demonstrates how distance learning can bring quality education to under-privileged students in under-funded rural school districts. The link between the schools and Ohio University also provides economical, efficient pre-service training for elementary school teachers. The schools have sought additional sources of funding and are in the process of transitioning the project from trail status to pay status and expanding it to other school sites. The Columbiana County distance learning network includes 11 high schools, the County Career Center, and two branches of Kent State University. The network has expanded to include a high school outside the county and has current plans to expand to two more high schools, plus the Juvenile Justice Alternative School and the Juvenile Justice Detention Center.

Stark County Schools, OH: This Ameritech project is an initiative targeted toward grades 6-12 to increase the ability of students to share ideas, expertise, and resources by linking together computer-based stations in libraries, government agencies, businesses, medical centers, schools, homes, colleges, and universities throughout the world. Activities will include: sharing ideas via e-mail and conferencing to transfer text, graphics, sound, and video between users; advancing the use of cooperative, discovery-based projects both within Stark County and with learners around the state and the world; and encouraging the use of electronic libraries, including specialized resource computers.

Toledo City Schools, OH: This Ameritech project creates multimedia learning environments for increased student, teacher, and parent technology use. Local resources will fund five computers for each classroom with connections to such outside resources as Toledo/Lucas County Public Library, the Internet, and National Geographic Kids Network. The school will also have access to IBM's EduQuest math, science, social studies, and language arts instructional software, as well as other programming options.

University of Findlay & Findlay City School District, OH: A \$500,000 Ameritech-Governor's EdTech grant was awarded to the University of Findlay to develop a teacher education curriculum designed to prepare teachers for applying advanced communications technologies in education, including two-way interactive video distance learning. The University is connected to the Findlay City School District with a fiber optic-based learning network.

OKLAHOMA

Chickasaw Holding Company; Sulphur, OK: Chickasaw Holding Company and its subsidiaries--Chickasaw Long Distance, Chickasaw Telecom, and Indian Nations Fiber Optics (INFO)--are part of ONENET, a joint government and business project which will connect educational institutions and government offices in a seamless interactive video and data network. Chickasaw is installing 9 of the 33 hub sites, each of which will have DS3 connections for video and data. Additionally, Chickasaw and INFO have invested over \$1 million and provided \$60,000 worth of outright grants to schools in Southern Oklahoma to provide them with access to ONENET with DS3 connections, full-motion interactive video and Internet service to the LAN in high schools and vo-tech schools. Chickasaw has also joined with four other independent LECs to provide seamless interactive video service, including Internet access, to four vo-tech schools. Elsewhere in the community, Chickasaw is making its network available to groups such as the Kiwanis and the Oklahoma Trial Lawyers Association for continuing education.

Dobson Communications Corp.; Oklahoma City, OK: Dobson Communications and its subsidiary, Dobson Fiber, operate a network of more than 450 miles of fiber optic cable in Western Oklahoma, the Texas Panhandle, and Eastern Colorado. In August 1993, Dobson Fiber networked Southwestern Oklahoma State University's main campus at Weatherford with its sister campus in Sayre 45 miles away. The system included full motion, two-way video. To date, Dobson has invested more than \$500,000 in fiber optics, video switching equipment, and electronics support. Dobson supports six sites throughout Western Oklahoma, including Cheyenne and Reydon public schools, Western Oklahoma State College at Altus, and Caddo-Kiowa Vo-Tech at Ft. Cobb, in addition to the SWOSU video classrooms in Weatherford and Sayre. Additional sites will be added for 1996-97 school year.

Dobson brings previous experience with successful distance learning networks to the Western Oklahoma project. In 1992, the company connected four public school districts in east central Oklahoma. Another school was added to the network in 1995. Dobson's total investment to date on this project amounts to more than \$250,000.

School Networking, OK: In the city of Broken Arrow, Oklahoma, GTE invested \$5,000 to install a fiber optic network linking 27 school and administrative sites. The network is used by the school district's administrative staff to facilitate accounting, finances, and administrative reports.

OREGON

The Network for Education and Research in Oregon (NERO), OR: In early 1995, US West began a technical trial of a multimedia network that allows five far-flung campuses in Oregon to strengthen their education and research programs by working together more closely. The

ultimate vision of NERO is a desktop-to-desktop voice, video and data network that brings student, faculty, and industry partners together for these projects, research, and learning experiences.

PENNSYLVANIA

Allegheny County, PA: Bell Atlantic has given \$200,000 to support improvements in K-12 education through advanced technology in Allegheny County. The funding will help provide model distance learning classrooms in several of the resource-poor school districts. The project will allow access to the same advanced, high quality, challenging curriculum as students from districts with more resources.

Children Achieving, PA: Bell Atlantic made a \$500,000 pledge toward the Philadelphia School District's Children Achieving program to incorporate technology throughout the learning process. Bell Atlantic is working jointly with the school district to promote state-of-the-art technology to provide access to enormously expanded education resources for students in the classroom and beyond. The large financial commitment and technical support helped the school district to secure a large award from the U.S. Department of Education.

Distance Learning, PA: Bell Atlantic provided K-12 public, private, and parochial schools an opportunity to compete for grants that would bring advanced telecommunications technology to their classrooms. Ten schools in urban and rural areas were awarded a total of \$312,000, furthering Bell Atlantic's efforts to make state-of-the-art telecommunications technology standard in education. Bell Atlantic granted \$75,000 in funding to establish the Bell Atlantic Distance Learning Center at the Lancaster-Lebanon Intermediate Unit. This regional training facility is used to demonstrate distance learning technology and solutions for a wide variety of audiences. A somewhat similar grant of \$25,000 was made to the Altoona Area School District's Center for Advanced Technology to help establish an advanced technology center. The center's curriculum and state-of-the-art telecommunications equipment enhances the student's learning skills and teaches them how to use technology that will become increasingly prevalent in everyday life.

Free Library of Philadelphia, PA: Bell Atlantic provided \$500,000 in funding to the Free Library of Philadelphia for the technology phase of the Free Library's Changing Lives Campaign. The campaign will equip the Free Library and its 53 branches with state-of-the-art information technology to facilitate its being a leader in connecting people with information. The Library's goal is to become the information superhighway's most accessible on-ramp in every community.

Greensburg-Salem Learning Lab, PA: Bell Atlantic has awarded a \$100,000 grant to help establish the Pennsylvania State Education Association's Greensburg-Salem Learning Lab. The lab will assist in demonstrating to all Pennsylvania educators the practical application of learning

technology in schools. The state-of-the-art facility will provide teachers with the resources necessary to incorporate advanced learning technology in the learning environment effectively.

RHODE ISLAND

Rhode Island Partnership, RI: Under the Rhode Island Partnership, NYNEX, the State Department of Education, Brown University and the University of Rhode Island are working together to provide Internet and other network access and training opportunities to teachers for use in the classroom.

In return for a four-year trial of price regulation approved by the Rhode Island Public Utilities Commission in 1992, NYNEX committed to an Asymmetrical Digital Subscriber Line (ADSL) technology trial, a voice messaging trial and additional public education trials, which provided access to the Internet and distance learning applications incorporating ISDN or ADSL. The purpose of the technology trials was to encourage the public to experiment with and utilize the capabilities of the network and to encourage innovative uses of telecommunications. An interactive video distance learning trial which was conducted in six locations for the East Providence Special services Department Nursery Resource Program ended under the terms of the settlement in December, 1995. The trial utilized advanced technologies (ADSL and ISDN) to allow a special needs school teacher to interact both in the nursery school and at home with three- to five-year-old children with learning disabilities and their parents. The Internet trial, which provides access lines without charge to all public libraries and not-for-profit K-12 schools for the purpose of accessing the Internet and was scheduled to end in December, 1995, has been extended by NYNEX until the end of the school year in June, 1996. As of year-end 1995, 2,271 lines had been requested and were in use by libraries and various school districts.

NYNEX will, subject to subsequent approval by the Rhode Island Public Utilities Commission, spend \$7.5 million over a 5-year period to provide Internet access to libraries and not-for-profit K-12 schools. NYNEX would provide the Internet services or other data network access, in consultation with and in accordance with methods and procedures approved by NYNEX and the Rhode Island Department of Education, using technology which is mutually agreed upon by NYNEX and the individual institution, and which allows for user discretion and flexibility for the most efficient use of available funding.

SOUTH CAROLINA

Horry Telephone Cooperative, Inc.; Conway, SC: HTC installed the state's largest school network linking 26 service area schools' computer systems with one another, thereby allowing for student collaboration on projects, e-mail, and remote CD-ROM access. HTC spent an initial \$1.5 million to upgrade its own equipment to accommodate the technology needs of the new network, and another \$250,000 for in-kind services in labor and equipment. HTC also actively

sought out competitive pricing for service providers of T1 connections, saving the school district another \$4,000. In addition to giving students and faculty instant access between campuses, the completed network allows students unlimited access to the Internet for a reduced monthly fee of \$100 per school.

Rock Hill Telephone; Rock Hill, SC: Rock Hill inaugurated Internet access to the public schools in its service area three years ago. Free dial-up access was begun in 1993. This was followed the next year by setting access rates equal to "at-cost." In 1995, the 23 schools were outfitted with T1 connections and donated routers. Schools were given preferential Internet access rates equal to that charged other government institutions. This year, Rock Hill has initiated a pilot project linking three high schools and a technical college using an ATM transmission system. The network would allow the transmission of data and access to the tech college's library. The project is slated for one year, though it may be extended pending the success of the program. Equipment installation costs and transmission costs for the first year will be waived.

SOUTH DAKOTA

Dakota Cooperative Telecommunications; Irene, SD: DCT is more heavily involved in traditional educational support for its local school system, but is also committed to the more recent developments. Dakota Co-Op provides free cable TV service to all service area schools, and has provided each school with a TV and VCR. The Co-Op also provides toll free access to the Internet with the schools receiving a discounted rate on the usage charge.

TENNESSEE

Gibson County Distance Learning Project, TN: Rural students in western Tennessee were given an early preview of the opportunities of the information highway when BellSouth selected Gibson County for a distance learning trial. The five school systems in the county teamed up to share teaching resources to conduct classes that would not have been possible in most of the schools. Later, the project was expanded to connect universities in Knoxville, Nashville, and Jackson to further expand teaching resources. Equipment and consulting expenses exceeded \$700,000 during the trial. Schools have enjoyed preferential pricing under a discounted statewide tariff since the end of the initial trial period.

TEXAS

Distance Learning, TX: GTE anticipates investing roughly \$10 million per year over a ten-year period in Texas to help establish a distance learning network for primary and secondary schools. Total investment for 1995-97 will be \$30 million.

Additionally, GTE is in partnership with Texas A&M University to establish the Center for Distance Learning in Bryan, TX. The Center will develop, test, demonstrate, and market learning applications for schools throughout Texas. The University will utilize its expertise in curriculum and course development, while GTE will work with school districts and libraries to develop the necessary networks, both on the local and state level, to provide a variety of educational opportunities. In addition to the digital switching network serving Bryan and College Station and an extensive fiber optic network linking GTE's offices, Texas A&M, and the Center for Distance Learning, GTE is also providing a building in Bryan to house the Center.

Five Area Telephone Cooperative, Inc.; Muleshoe, TX: Five Area Telephone Cooperative and West Plains Telecommunications have invested many hours in recent years trying to determine how to provide distance learning and telemedicine. They are now working with 8 schools for funding from the recently adopted "Texas Telecommunications Infrastructure Fund." Presently, 70 miles of fiber optic cable are being installed to connect five new digital switches to the existing toll tandem switch. Included will be adequate facilities for the 8 schools to be connected to the Internet and be provided with voice mail.

Muenster Telephone Corporation; Muenster, TX: MTC has operated the North Texas Educational Network (NTEN) since 1993. The network provides full motion video simultaneously to four high schools in the north Texas area. For the current 1995-96 school year, the North Central Texas College at Gainesville, TX was also added to the network. NTEN also includes a 10Mb Ethernet WAN between the sites on the network, giving the schools and college high capacity access to the Internet through MTC. Classroom equipment for the network was purchased with aid of a RUS grant, with technical assistance being provided to the school by MTC. Muenster has invested more than \$900,000 in educational initiatives, such as NTEN, since 1990.

Texas Telecommunications, TX: Before the end of the Year 2000, SBC Communications will have invested \$586 million to improve the information superhighway in Texas and provide better educational access to it. Specifically, SBC has committed to offer public and private schools and public libraries unlimited toll-free Internet access to an Internet provider in those locations where local access is unavailable. Improvements to the information superhighway will include broadband services to schools and hospitals. Current estimate are that \$202 million will be spent by the end of 1998. These changes will include converting 100% of all exchanges to digital switching capability; providing ISDN connectivity to all offices; 50% conversion of all access lines to digital service; and achieving 100% interoffice fiber connectivity to all communities.

Valley Telephone Cooperative; Raymondville, TX: Valley Telephone has developed a distance learning / interactive TV network with four south Texas school districts. Valley Telephone worked in conjunction with these schools on system design, personnel training, equipment installation, and grant writing for federal funding. The project was one of three in the country chosen by the Department of Commerce for funding. Each school is equipped with a

full motion, two-way interactive video and audio network with dedicated T1 bandwidth. The project, begun four years ago, is still in progress and the initial investment for the system hardware totaled \$250,000.

UTAH

Utah Community of Interest Network (COIN), UT: US West is working with the State of Utah to create a state-wide electronic network to give both rural and urban residents access to distance learning, telemedicine, home banking, video conferencing and other services. Virtually every state and local government and education site will have access to the information superhighway.

VERMONT

National Association of Partnerships in Education (NAPE), VT: In Vermont, NYNEX implemented an “intergenerational” project with NAPE. This partnership consists of NYNEX, the Vermont Department of Education, AARP, SeniorNET, RSVP and the Vermont Chamber of Commerce. NAPE chose three Vermont public schools to plan, develop and implement an innovative project aimed at utilizing senior citizens in the schools. Through use of donated PCs, NAPE in conjunction with NYNEX set up a community network connecting senior citizen centers with the schools for purposes of information sharing and experiential learning. The project was a rousing success, and now seniors vote in favor of technology when the school budget comes up for a vote.

The National Business Roundtable Education Task Force, VT: In Vermont, NYNEX is in the seventh year of a ten-year commitment to help facilitate systemic education reform through the use of technology, under which NYNEX funds several grant programs.

ParentLink, VT: The State of Vermont Department of Education with the participation of NYNEX developed the ParentLink program, which provided ten schools in Vermont with Voice Messaging services. An independent study showed that the program improved parent-teacher communications and increased parental involvement and satisfaction. Based on the results, additional schools purchased Voice Messaging.

Vermont Educational Telecommunications Consortium, VT: NYNEX provides funding through VETC to teachers who develop and implement innovative uses for telecommunications technology in their K-12 classrooms. VETC directs efforts to all schools to support the use of telecommunications to facilitate classroom learning. Its mission is to connect all classrooms across the state. Some exciting applications have been developed as a result of these grants.

Vermont GovNet, VT: NYNEX was awarded the contract to expand the GovNet’s Internet

access to the K-12 community. To help stimulate interest, NYNEX is hosting a fair to raise awareness of the potential of the Internet as a tool to create new learning environments in classrooms.

Vermont Interactive Television (VIT), VT: The Vermont statewide multi-channel analog video network was implemented with the help of NYNEX for purposes of professional teacher development, college classes, including those for nursing certification, technology training and community interests.

Vermont ISDN Trial, VT: NYNEX has agreed to work with the State of Vermont to implement an ISDN trial for 20 schools, to be implemented for the 1996-97 school year. The parties have agreed to form an advisory board--made up of education, business and government representatives--which will go through an RFP process for selection of the 20 schools.

VIRGINIA

Blacksburg Electronic Village; Blacksburg, VA: In the Blacksburg area, a Bell Atlantic network investment of approximately \$7 million was made over the few years prior to formalization of the Blacksburg Electronic Village. Since the announcement of the Blacksburg Electronic Village, a further \$700,000 to \$1 million worth of network investment--such as LANs to apartment buildings, business districts, and the like--has been made directly supporting the demand for digital communications.

CFW Educational Challenge; Waynesboro, VA: The CFW Foundation, the philanthropic arm of CFW Communications, has implemented the CFW Educational Challenge to initiate and support a county-wide computer network for the three service area school systems. CFW will spend upwards of \$250,000 for the data network. CFW will provide all the technical expertise to install a WAN which will connect more than 300 computers in all public schools, libraries, and school administrative offices to each other and the Internet. The project will be completed by 1997. The first portion of the project was completed in late 1995 with the installation of network facilities to all 13 middle schools and high schools in Waynesboro, Staunton, and Augusta Counties. Subsequent installations will extend facilities to 21 elementary schools and their respective administrative offices.

Distance Learning, VA: In 1994, Bell Atlantic announced a total of \$1 million in direct grants to K-12 schools undertaking distance learning projects. In 1995, an additional \$1 million worth of grants was announced to K-12 schools seeking distance learning assistance.

Distance Learning, VA: In Southwest Virginia, GTE invested \$220,000 to provide interactive connectivity between Southwest Virginia Community College and two high area high schools.

R&B Telephone; Daleville, VA: This past Fall, the company installed the necessary equipment

and facilities to bring interactive educational TV service to Botetourt County Schools, linking two high schools, a tech-ed center, and a community college. Discussions are being held to link another community college to the system. R&B's fiber network utilizes SONET systems between sites at DS3 transmission rates. R&B and its charitable foundation made donations totaling \$130,000 to fund classroom equipment and first year operating expenses, while the fiber optic equipment and plant needed to link the four current sites amounted to \$473,000. The interactive classrooms are capable of transmitting and receiving real-time video, data, and voice communications. This builds substantially upon the parent/teacher voice mail which the phone company has been providing for the past four years. Moreover, R&B Communications, parent company of R&B Telephone, will soon launch a new subsidiary, R&B Internet Services, that will provide Internet access to people and businesses in the Roanoke metropolitan area.

Shenandoah Telecommunications; Edinburg, VA: The company has completed the installation of a distance learning system connecting three service area county high schools at an initial cost of \$148,000 and annual operating costs of \$56,000. The fiber system provides two-way interactive, full motion color video and high quality audio at each location. Beginning in 1996, the company is offering Internet access to local schools, along with the ability to establish their own World Wide Web page free of charge. Every public school within the Internet service area has been offered a free account with a local access number. In addition, each school will have an unlimited number of hours of Internet usage.

WASHINGTON

Pacific Telecom, Inc., WA: PTI was recently forced to cease operations for a closed distance learning system it had installed on the San Juan Islands due to budget cutbacks in the school district. The system was installed through the collaboration of PTI, Northern Telecom, and the school district to combat the unique geography of the Islands. Owing to their insularity, many of the children on the Islands must take the ferry to school. The cost of the ferry is such that many parents cannot afford to ferry the children back and forth each day. Consequently, many children ferry to the school and then stay there until the end of the school week. The installation of the DS3-based broadcast quality fiber optic system allowed the parents to take a greater part in the school lives of their children than had been the case previously. Unfortunately, the school was unable to find adequate funding after the first year. Accordingly, PTI was obligated to shut down the system some six months after school district funds for the program were exhausted.

Sparks Technology, WA: The Spokane School District was awarded a US West grant to implement a technology demonstration site. The project demonstrates how technology can be used to improve learning, demonstrates how the teacher's role changes with the infusion of technology into the classroom and portrays library media centers as informational hubs that reach into the classroom and beyond the school.

Washington State Distance Learning, WA: Washington State Distance Learning got a

\$300,000 boost in grants from US West to help support implementation of Distance Instruction programs at Bellevue Community College, Green River Community College, Clark College and Spokane Falls Community College. These grants enable Washington students to earn both secondary and college credits emphasizing the use of technology.

WEST VIRGINIA

World School, WV: The World School program is a joint Bell Atlantic / State Government project that has interconnected all 890 public schools. Furthermore, all 790 schools in Bell Atlantic's service territory are being connected to the Internet, with five classrooms per school being the typical allotment. Bell Atlantic is donating routers, software, teacher training, and mid-level carrier fees until the end of 1997. Over 200 schools have been equipped so far.

WISCONSIN

Access Wisconsin: Access Wisconsin is a LEC-based initiative which provides--in part--full motion distance learning to several Wisconsin schools. Access integrates the various elements from each participating LEC into a transparent network providing video, voice, and data services to schools. Each of the following projects was implemented under the direction of Access Wisconsin:

- **Northern Wisconsin Educational Communications System (NWECS):** Chequamegon Telephone Cooperative, Frontier Communications-St. Croix, Inc., PTI, GTE, and Ameritech provide full motion video distance learning to 15 schools in northern Wisconsin. This \$3 million DS3 digital network utilizes three video switches and provides additional T1 data transmission. The network also connects to a compressed video codec.
- **South Central Instructional Network Group (SCING):** Peoples Telephone, Central States Telephone (TDS), PTI, and GTE provide a full motion video DS3-based digital network to 11 schools in south central Wisconsin. In addition to the video service, this \$1.5 million network is preparing to add T1 Internet service.
- **Western Wisconsin Instructional Network Group (WestWING):** Eleven LECs--Spring Valley, Clear Lake, Milltown Mutual, Baldwin Telecom, Century, Chibardun Telephone Cooperative, Somerset, Amery, Frontier Communications-St. Croix, Inc., GTE, and Ameritech provide full motion DS3-based video distance learning to 13 schools in western Wisconsin. The \$3 million network uses two video switches equipped with quad split units to allow four schools to share video simultaneously on a single TV monitor.
- **Wisconsin Overlay Network for Distance Educational Resources (WONDER):**

Wittenberg, Central Region (TDS), Century Telephone of Wisconsin, Frontier Communications of Wisconsin, Inc., GTE, and Ameritech provide a full motion DS3 digital network to five University of Wisconsin campuses and four Wisconsin Technical Colleges. The \$3 million network connects with the other Access Wisconsin networks located in Wisconsin allowing college-level course to be taught in several high schools throughout the state.

Ameritech Homework Helpline, WI: Ameritech contributed \$300,000 to fund the Ameritech Homework Helpline. The Helpline is a statewide "800" number that children may call to receive assistance on homework problems from certified teachers. The Ameritech grant provided start-up funding for the 1994-95 and 1995-96 school years.

Bloomer Telephone; Bloomer, WI: The company plans to invest over \$30,000 this year to provide T1 bandwidth for a LAN connecting three public schools and the local public library. The system will also provide the schools and library with T1 access to the Internet. Currently, Bloomer Telephone provides Internet access via dial-up access.

Curriculum Development Grants, WI: Ameritech funded the development of curriculum designed to instruct teachers in the use of advanced telecommunication technologies. Grants for new and in-service teacher training totaling \$450,000 were awarded to University of Wisconsin branches in River Falls and Whitewater, as well as Alverno and Marian Colleges.

Information Infrastructure Improvements, WI: GTE made a contribution of \$495,000 in 1995 for information infrastructure improvements in Wisconsin encompassing education and healthcare.

SuperSchools, WI: In 1994, Ameritech funded a \$2.2 million "SuperSchool" initiative. The project provided grants of \$350,000 to \$450,00 to each of five schools for advanced technology. Five additional schools were selected as partner schools for the purpose of video distance learning. Among the innovative programs implemented with the new technology is an ongoing collaboration between John Marshall School and Hugh Christie Academy in Great Britain.

OTHER PROJECTS

Access America: Access America is a consortium of more than 50 public access TV stations using the Internet to share community programming ideas and experiences. The Bell Atlantic Foundation has made a \$25,000 grant to Access America to help with the installation and operation of free kiosks for Internet access, and Internet and computer literacy training courses. An additional grant was made by Bell Atlantic to expand on-line guidance for teachers who are planning to infuse multi-media and video learning tools into their teaching process.

Basic Education Connection: Early in 1994, Bell Atlantic committed to connect all public K-

12 schools in its service area to video on demand and the Internet when the school's neighborhood becomes served by the Full Service Network. Educational programming will be provided free of charge to these schools to the extent that Bell Atlantic is legally permitted. The initiative will be funded by Bell Atlantic share-owners.

Distance Learning, the South: During the 1990's, BellSouth collaborated with education and government leaders in six states to test the use and value of BellSouth distance learning networks. More than \$16.5 million was invested by BellSouth in site-based equipment, network infrastructure, and technical services and support. Interactive networks connected public schools, community colleges, universities, teacher education programs, and public television networks in a variety of combinations to learn about both the technical and educational requirements necessary for effective learning over the network. The trials were instrumental in identifying the potential for the more comprehensive concept of an information superhighway and for advances in educational understanding of the teaching and learning process.

Earthwatch; NJ, DE, DC, DoD: The Bell Atlantic Foundation made a grant of \$98,000 to Earthwatch for its classroom teacher training project. The grant made it possible to include teachers from New Jersey, Delaware, the District of Columbia, and overseas schools run by the Department of Defense in Earthwatch field projects, on-line curriculum development, and inter-classroom sharing.

Education Credits, CA, HI: In both the states of California and Hawaii, GTE is offering "education credits" of \$2,000 to each public school and library for the purchase of advanced services and technical consulting. Advanced services include ISDN, Switched 56, and frame relay for LAN interconnection. Total investment in the two states in these projects amounts to \$7.5 million.

Excellence in Education Awards: Initiated by NYNEX in 1992, grants are carried out through an RFP process, and go toward programs and projects that foster the application of technology into the curriculum in college classrooms and in grades 7 to 12 classrooms from Maine to New York. The first-place award this year went to Brown University, which will use the funding to expand its TV system to provide more than 250,000 K-12 students in Rhode Island with interactive workshops and distance-learning language classes in 14 languages. NYNEX has previously given awards totaling over \$1.9 million through this program. In 1996, its fourth year, NYNEX has announced it will dispense a total of \$1.2 million in grants.

Homework Hotline, IN, WI, OH: Ameritech Indiana's Partners in Education team and the Lew Wallace Elementary School faculty developed this service to enable teachers and parents to communicate after hours. The teacher can record messages listing homework assignments and any other pertinent information, while students and parents can leave messages with the teacher. Ameritech Wisconsin provides funding for 15 Homework Hotline or parent information line programs at various schools throughout that state. Ameritech Ohio is funding a trial of the "Education Hot Line" involving 19 intermediate schools in the Cleveland public school system.

Knowledge Network Gateway: Now being tested by Pacific Telesis, the project will give participating schools low-cost, high-speed access to the National Science Foundation network of information and university library data bases. Knowledge Network Gateway also will include access to other education resources such as computer bulletin boards, electronic mail and up-to-the-minute curriculum outlines from textbook publishers.

National Geographic Society Education Foundation/KIDSNET: NYNEX has been a partner with National Geographic's development of National Geographic Kids Network since 1991, when it supported the development and testing of this science curriculum project series for grade four through six. NYNEX funded 86 classrooms in New York, Vermont, the U.K., Gibraltar and Prague, and in 1995, brought KIDSNET to 50 inner-city classrooms in Boston and New York. Using dial-in and networking services along with interactive software, participating classrooms share information about such things as water quality with their sister sites and foreign countries, and have dialogues with their school teams and real-life scientists. Groups of classes are linked in teams of about twelve. The program is now used by 40,000 classrooms in 47 countries.

Preferential Pricing for Education: BellSouth has arranged preferential pricing for educational institutions in six states throughout its service region. This pricing offers schools savings of \$47 million annually on regular access lines into the classroom used for educational applications, and \$10 million per year on ISDN, SynchroNet, and Megalink services that support interactive video, Internet access, and other information services.

Project Candle; NJ, PA, DC, VA, and DE: Project Candle consists of two parts. The first is a Bell Atlantic Foundation grant of \$1.5 million to the Library of Congress' National Digital Library. The funds will be used to advance the Library's aggressive digitization project -- converting unique, exciting holdings into digital versions that can be shared with all school children over the Internet. The second part is a Bell Atlantic project to help equip and connect via ISDN five or six schools committed to including Internet materials in their teaching plans. Teacher training would also be provided for these schools. Schools have been selected and implementation has begun in New Jersey, Pennsylvania, Virginia, Delaware, and the District of Columbia.

Project MANTLE: Bell Atlantic has granted more than \$144,000 to a coalition of 30 school systems, universities, and state education agencies to support Project MANTLE (Mid-Atlantic Network for Teaching Learning Enterprises). The project provides distance learning training for teachers. It is modeled after the highly successful Project Explore in Union City, New Jersey. Curriculum materials developed will be shared throughout the Bell Atlantic region and updated by MANTLE.

Regional Educational Technology Cooperative: BellSouth administered the formation of the technology cooperative to enable schools from different districts or states to work together toward common goals. Funding for the first two years is \$150,000.

Teacher Preparation and Assessment Strategies, SC, LA: BellSouth is underwriting a collaborative project by the College of Charleston and the University of New Orleans which are joining forces to examine how well teacher's training programs are preparing new teachers to teach in restructured schools. BellSouth has agreed to fund a total of \$200,000 over two years.